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EX PARTE REEXAMINATION CERTIFICATE ISSUED UNDER 35 U.S.C. 307

THE PATENT IS HEREBY AMENDED AS INDICATED BELOW.

Matter enclosed in heavy brackets [] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

Claims 1, 8 and 13 are cancelled.

Claims 2, 3, 6, 9-11 and 14-16 are determined to be patentable as amended.

New claims 18-20 are added and determined to be 20 patentable.

Claims 4, 5, 7, 12 and 17 were not reexamined.

- 2. The haptic feedback device of claim [1] 18, wherein the pulse is delivered perpendicular to the plane of the touch screen.
- 3. The haptic feedback device of claim [1] 18, wherein the pulse is delivered parallel to the plane of the touch screen.
- **6**. The haptic feedback device of claim **[1]** *18*, wherein the pulse delivered to the touch screen varies in magnitude depending on which one of the plurality of menu elements is selected.
- 9. The haptic feedback device of claim [8] 19, wherein the pulse is delivered perpendicular to the plane of the touch screen
- **10**. The haptic feedback device of claim **[8]** *19*, wherein the ³⁵ pulse is delivered parallel to the plane of the touch screen.
- 11. The haptic feedback device of claim [8] 19, wherein the pulse imparted to the touch screen varies in magnitude depending on which one of the plurality of menu items is selected.
- **14**. The haptic feedback device of claim **[13]** 20, wherein the pulse is delivered perpendicular to the plane of the touch screen.
- **15**. The haptic feedback device of claim **[13]** 20, wherein the pulse is delivered parallel to the plane of the touch screen.
- 16. The haptic feedback device of claim [13] 20, wherein the pulse imparted to the touch screen varies in magnitude depending on which one of the plurality of menu items is touched.

18. A haptic feedback device, comprising:

- a touch screen operative to display a graphical image and to output a position signal indicative of a selected location on the touch screen in two dimensions; and
- at least a first actuator configured to impart a first force directly to the touch screen to thereby provide a first

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haptic effect in response to the selection, the first force based on information output by a computer device,

wherein a menu comprising a plurality of menu elements is displayed in the touch screen and the first haptic effect is a pulse delivered to the touch screen in response to the selection made of one of the menu elements, and wherein a sub-menu is displayed in the touch screen with the menu after the selection is made of one of the menu elements, and a second haptic effect is provided when the sub-menu is displayed.

19. A haptic feedback device, comprising:

- a touch screen operative to display a graphical image received from a computer device and to output, to the computer device, a position signal indicative of a location, selected by a user, on the touch screen, the location having two dimensions; and
- at least a first actuator operative to impart a first force directly to the touch screen to thereby provide a first haptic effect in response to the user selecting the location on the touch screen, the first force based on information received from the computer device,
- wherein the graphical image is a menu comprising a plurality of menu items, and wherein the first force is a pulse imparted to the touch screen in response to the user selecting one of the plurality of menu items from the menu on the touch screen, and wherein the pulse imparted to the touch screen varies in magnitude depending on a frequency of use of the selected one of the plurality of menu elements, and wherein a sub-menu is displayed with the menu after a selection is made of one of the menu elements, and a second haptic effect is provided when the sub-menu is displayed.

20. A haptic feedback device, comprising:

- a touch screen that receives a menu comprising a plurality of menu items from a computer device, that displays the menu, and that, in response to a touch on the touch screen by a user, outputs a position signal to the computer device, the position signal indicative of a location of the touch on the touch screen by the user, the location having two dimensions, the location corresponding to one of the plurality of menu items; and
- at least a first actuator that imparts a pulse to the touch screen at the one of the plurality of menu items based on information returned by the computer device in response to the position signal, the pulse thereby providing a first haptic effect to the user in response to the user touching the one of the plurality of menu items and wherein the pulse imparted to the touch screen varies in magnitude depending on a frequency of use of the selected one of the plurality of menu elements, wherein the touch screen displays a sub-menu with the menu after a selection is made of one of the menu elements, and a second haptic effect is provided when the sub-menu is displayed in the touch screen.

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